

to explain how such powerful mineral acids can be secreted in a free state in the perfectly healthy organism of a living animal.

The first of these questions is to a certain extent answered by Troschel. He has seen the stream of liquid projected by the animal issue from the mouth and attain a length of several feet. This is an indication which the physiologist must not allow to pass unappreciated. It appears rational to conclude therefrom, that at least a great part of the salivary liquid is not employed in digestion. On the other hand, it is very probable that the *Dolium* makes use of it as a defensive weapon. The shell of *Dolium* has a very wide opening, and is destitute of a protective operculum, so that the animal is exposed to every kind of attack. It is probable that it defends itself against its enemies by means of the sulphuric and muriatic acids of its saliva. We must not forget, however, that as the animal lives in water, its saliva cannot act at any great distance. We might suppose that the saliva is employed for two different purposes, on the one hand for defence, and on the other for digestion. This latter function, however, appears to be contradicted by an observation of Troschel's. In the stomach of many specimens of *Dolium* he found the *débris* of *Fuci* bearing small animals with calcareous shells, such as *Polypes*, *Serpulæ*, &c. When exposed to the action of the saliva, these fragments of calcareous shells were dissolved, with a strong effervescence, in less than a minute. We may therefore conclude that the *Fuci* had not been in contact with the saliva either before, or during, deglutition. The saliva, consequently, has probably no relation to digestion.

It is curious that the membranes of the animal itself which are in contact with the acid are not attacked thereby. This liquid also has no effect upon the shell of the *Dolium*, especially upon its inner surface, which is covered by a delicate polished varnish, unalterable by acids.

The *Dolia* are not endowed with the faculty of perforating stones; but the mere fact of the secretion of a free acid in these Mollusca, shows that it is not impossible that perforating animals may secrete a substance capable of chemically acting upon calcareous rocks. It is true that the perforating Lamellibranchiate mollusks are destitute of salivary glands, but it is not impossible that some other part of the body may assume the secretion of an acid liquid.—*Monatsber. der Akad. der Wiss. zu Berlin*, August 1854, p. 486.—From the abstract by E. Claparède in *Bibl. Univ. de Genève*, February 1857, p. 161.

Note on the occurrence of the Harvest Mouse in Cornwall.

By CHARLES WILLIAM PEACH.

In the 'Zoologist' for the present month, at page 5592, I observe a communication from Mr. E. H. Rodd, mentioning the occurrence of the *Mus messorius* at Penzance, and of its not having been noticed in Cornwall before. I find in Couch's Cornish Fauna, part 1, page 7, that it is common, and so it occurred to me, for during my residence at Goran Haven, this beautiful little creature was well known to me, from having seen it and its nest on the stems of corn in the fields, and

in winter—at times by dozens—in the corn-stacks, where other mice were more abundant, when the farmers were taking their corn into the barns; for at such times, either myself or children were often requested to attend with my old and favourite dog Hassan, who, though a large fellow, was exceedingly quick, and very fond of catching mice and rats, and few could escape him: the red mouse (harvest mouse) was a delicate and dainty morsel; these he immediately swallowed, the other mice and rats he merely killed. My children on one occasion took home some of the harvest mice; for these I made a small cage; they lived with us some time, drank milk freely, fed on any sort of grain or bread, and it was interesting to watch their gambols and see them suspend themselves by their prehensile tails from the wires of the cage; unfortunately, these wires were so flexible that one by one they got out, and no doubt fell a prey to pussey.

As I have introduced my dog, I may as well mention a trait in his character, proving that he was as “rigidly faithful and honest,” as the dog mentioned at page 5590 of the same publication; he differed, however, from this tailless one in having a splendid black “tail wi’ upward curl,” tipped with white. A butcher visited the Cove every Friday; the dog most certainly knew the day and was invariably on the look-out, and immediately took possession of the shop, and, when the butcher was absent, full charge of the meat,—was frequently shut up with it, all lying around him, even on the low block on which it was chopped, and woe betide the cat that attempted to steal.

He however claimed as his perquisite the small pieces that dropped when chopping, but should a large piece fall, he did not interfere. Hassan had not been trained to keep shop, for I had him when only a month old, nor did I tell him to attend the butcher; he carried his character in his look, and so gained the situation—

“His honest, sonsie*, baws’nt face,
Aye gat him friends in ilka place,”

and greatly respected he was by all my neighbours, for his honest and quiet good-nature. With the children he was an especial favourite, and constant attendant in their walks. A more intelligent “faithful tyke” there could not be; he lived with me fifteen years; since his death I dare not keep another—I cannot bear these partings.

I could tell very many things about him, showing a something which throws *mere instinct into the shade*, but must not trouble you farther, beyond mentioning that, however good a character he had, his name (Hassan†) got one of my little sons, for a time, a bad one. On removing to Fowey, a lady inquired of him the dog’s name; he said, “Hassan, madam.” She mistook it for “ask him, madam,” and thought him impertinent; a friend to whom she mentioned it explained. From that time both dog and boy became favourites with her—the dog soon learned to lift the latch of the door leading to her kitchen, and many a piece he got by it.

Wick, Caithness, N.B., May 24th, 1856.

* He had, like Burns’s dog, “a white stripe down the face.”

† ‘Camel-driver.’